4-679.)

SUR. GEOLOS. LETTER. 001 7 1892

FIELD NOTES

OF THE SURVEY OF

THE SUBDIVISIONAL LINES
<u>0 P</u>
. • ,
TOWNSHIP NO. 162 NORTH.
<u> </u>
RANGERO, 82 WEST.
Of theFifth Principal Meridian,
AS SURVEYED BY
THOMAS F. MARSHALL 96. S. Deputy Surveyor,
inder his Contract No. 5 , dated Lay 18th 1891 .
arey commenced August 5th., 1891.
arrey completedAugust. 7th., 1891.
****** +-IE

Names and Dutics of Assistants.

The Famly Phainman. Soward E. Jones. Chain man. arthur L. Lack Flagman. Charles L. Care moundman. Gruet W. Thompson Moundman Charles H. mones mound maw. Ind Q. Todais. Chairman. Edwin H. Wiper Chain man. Louis B. Jukles Flagman. Galph H. Oaker Moundman. The Jocken herry Moundman. Just Freken Line Moundman John a. Nestro, noundman

INDEX DIAGRAM.

Township 4.2	75 , Range 52 77
2- 1/	
-23 -23	13 4 3
・中・中	. 5 . 7 . 7 . 1
ην - 1 , γ, -	13 13 14
10 A) 11 /	16 12 3
2 - /4	
- 10 - 20 -	15 - 1 5 -
• 19 • 15	88 1/ 87 7 88 7
19-19-	10 10 10 11 2
" / " / "	

Meanders Page

Preliminary Oaths of Assistants. wa John Hards and Found & Jones even ground, and plumb the tally-pine either by sticking or dropping the same; that we lines of Jup. 162 n. a. or H. of the 5th John Barald ... chainman wind to dich and in min sier I may compelled administrate the above with Thomas F. Markel myself of man & mortal. Je D. Defeaty Juneyor myse omplow and Garle H. Monie omplow and Garle H. Monie Charies H. Carr, Ewel 4 duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Auditure of July 162 11. 9. 12 11. 14

Charles & Page mas & Marshall Diring to dist by incoming a made compelled to administrate about propelly. Marchell. 804

INDEX DIAGRAM.

Town	ship.		, Range		
		•	•		,
. •	1	•	10	25	n
18		*	16	14	14
	•	9 1		•	••
**	**	**	81	, e	84
	**	**	84		•

Meanders Page _____

Preliminary Gaths of Assistants. Fred O. Lolger and Edwar L. Vaper do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level th over even and uneven ground, and plumb the tally-pine cither by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the last of skill and ability, and in accordance with instructions given as in the survey of the survey of the statistical and silling the statistical and shill for the Om. Fred I Lodge Edwin H. Hiper Buberited and ever to before me this 27 duning to dish and were day of fully 1891. I want compelly to admin the above with my sift Diving to dish and men un I'm, Louis Ca. Gilles Palke ft. Bules John do solemnly awar that we will well and truly perform the during of exemon in the establishment of corners and other duties, according to instructions given us, and so the best of our skill and ability, in the survey of the full the 5th Orinifal mindian. Louis B. Lickles Flagman Galph T. Baker mounton Subscribed and sworm to before me this 27 och Tocken herry mounders day of feeling Marchael Juhn G. Moster mounders U. l. Deputy Russeyer diving to dish any accommon above out myself. Thomas J. Marchel.

Township 162 North. Range 82 West of the 5th Principal Meridian.

Survey commenced Aug. 5 '91 executed with a Burt's Improved Solar Compass no number. manufactured by William Young and Sons. Philadelphia Pa.which instrument was tested on the meridian at Bismarck. N.D. and approved by the surveyor general. A Burt's improved Solar Compass with telescope attachment on sight no number, manufactured by W. and L.E.Gurley Troy, N., was also used. This instrument was taken to Bismarck, but owing to cloudy weather it could not be tested on the meridian there; but I carefully tested it on a private meridian at home and compared it with the Young Solar above referred to which had been approved by the surveyor general and found correct.

Two No.12 steel wire brased link chains were used for measureing and were daily compared with the Standard . The Standard used was a steel tape which was compared with the Standard at the Surveyor General's office at Bismarck. N. D. and approved by the surveyor general. The Standard was used for no other purpose.

At my camp in sec. 24 of township 182 N. R.83 W. in Lat. 48*51 N. on the night of Aug. 7, 1891. I take an observation on Polaris with a Gurley Transit for the purpose of the star, I carefully lower the telescope and mark the local astronomical mean time of observation August 7,1891..... 9 h. 05 m. Add

33 05 Local mean time of U.C. of Polaria Aug. 1st, 1891 16.36.2 Correction for 5 days Correct local mean time U.C. Polaris Aug. 6,1891.... 18.6 Difference is hour angle of Polaris... Subtracted from 16 48.4 23 Argument for Table 2

Asimuth 1049 Rast. I tested my Solar on this meridian and find that it re traces same. My Solars are therefore in adjustment. NOTE; During the progress of the work in this township

I was unable to take an observation on Polaria owing to cloudy weather.

From the cor. To Twps. 161 and 162 N.Rgs. 81 and 82 W. which is a scone firmly set and properly marked and with nessed as described in the field notes furnished by the surveyor general I run

North along thee east boundary of sec. 36.

Va. 16 . 00 'E.

At 40.00 cha. found the t sec. cor. At 80.00 chs. found the sec. cor-

From the cor. to twps. 181 and 162N.R.81 and 82.W.

S.89 .56'V, along the south boundary of sec. 36. Va.16.00'E.

At 39.98 chs. at a point 10 lks. S. of t sec. cor. At 79.97 chs. at a point 22 lks. S. of sec. cor. the true course of the south boundary of sec. 38 is

Township 162 North, Range 82 West of the 5th Principal Meridian,

Chains. M. 89.65 'Y. and the course of the east boundary is N. As the courses and the chaining practically agree with the original survey. I proceed with the subdivision of this township. From the cor. to secs. 1, 2 35 and 36 on the south boundary of the township herein before described N. 0.01 W. bet. secs. 35 and 36. At 8 A.M. Aug. 5 1891 Magnetic declination observed Va. 16 09'E. 03' Reduction to mean Va. 16 08 R . Mean declination Set a granite stone 12x8x6 ins. 8 ins. in the ground set a grante stone izxoxo ins. 3 ins. in the ground for t sec. cor. merk d t on W. face, dug pits 1 12 lins. N. and S. of stone 5 tt. dist. and raised a mound of earth 1 tt. high, 3 tt. base alongside. Set a granite stone 12x11x7 ins. 8 ins. in the ground for cor. to sees. 2 2. 28. 35 and 36 marked with 1 notch on R. and S. edges. dug pits 1 x18x12 ins. in each sec. 5 tt. dist. and raised a mound of earth 2 ft. high, 4 tt. base alongside. 40.00 80.00 Land gently rolling Soil lat rate. S.89°55'E. on a random line bet. secs. 25 and 36. Va. 16 09'R. 40.00 Set a temporary & sec. cor.
Intersect east boundary of the township at the cor. to 79.92 secs. 25, 30 31 and 36, which is a stone firmly set and properly marked and witnessed as described in the field notes furnished by the surveyor general. Themse I run N.89.55'W. on a true line bet. secs. 25 and 36. Va.16.09'R. 39.96 Set a granite stone llx9x7 ins. 8 ins. in the ground for t sec. cor. marked t on N. face, due pits 18x18x 12 ins. E. and W. of stone 5t ft. dist. and raised a mound of earth 1t ft. high, 3t ft. base alongside. 79.92 The cor. to secs. 25, 26, 35 and 36. Land gently rolling Soil lst rate. N.0.01'W. bet. secs. 25 and 26. Va.16.09'E.

40.00 Set a granite stone 12x8x8 ins. 8 ins. in the ground for t sec. cor. marked t on W. face, dug pits 1x18x 12 ins. N. and S. of stone 5t ft. dist. and raised a mound of earth 1t ft. high, 3t ft. base alongside.

80.00 Set a granite stone 11x10x9 ins. 8 ins. in the ground for cor. to secs. 23. 24, 25 and 26, marked with 1 noteh on R. and 2 notehes on S. edges, dug pits 18x 18x12 ins. in each sec. 5t ft. dist. and raised a mound of earth 2 ft. high, 4t ft. base alongside.

Land gently rolling Boil 1st rate.

811

Township 162 North, Range 82 West of the 5th Principal Meridian.

OHT:	411P -	
Chair	18-	
-		S-86°6. 'E. on a random line bet - secs. 24 and 25. Va-16°00'R.
40 d 80 d	00	Set a temporary \$ sec. cor. Intersected east boundary of the township 12 lks. S- of cor. to secs. 10, 24 20, and 30, which is a stone firmly set and properly marked and witnessed as des- cribed in the field notes furnished by the surveyor general. Thence I run
	1	West on a true line bet. secs. 24 and 25.
3	-20	Enter mondow, extends 5.00 chs. N. and 3.00 chs. S. of line.
40	.00 .01	of line. Loave moade /, bears N. and S. Loave moade /, bears N. and S. Set a granite stone 12x3x7 ins. 3 ins. in the grand for 4 sec. cor. marked 4 on N. face, dug pits 18x18x 12 ins. E. and W. of stone 04 ft. dist. and raised a mound of earth 12 ft. high, 32 ft. base alongside. Conter of drain, 30 lks. wide, course S. E. The cor. to secs. 23, 24, 25 and 23.
00		Land gently rolling
	ļ	Soil Ist rate.
		> 04
	Ì	N.0°01'W. bet. secs. 23 and 24-
13	3-00	Enter meadow and drain, extends 40.00 chs. N. W. and 15.00 chs. S. E.
	1 .00 0.00	beave meadow, bears N. W. and S. R. Leave meadow, bears N. W. and S. R. Set a granite stone 20x11x6 ins. 15 ins. in the ground Set a granite stone 20x11x6 ins. 15 ins. in the ground for \$\frac{1}{2}\text{ sec. cor. marked \$\frac{1}{2}\text{ on W. face, dug pits 18x18x for \$\frac{1}{2}\text{ sins. N. and S. of shone \$\frac{1}{2}\text{ f. dist. and raised a mound of earth \$1\$ ft. high, \$\frac{3}{2}\text{ fi. base alongside.} mound of earth \$1\$ ft. high, \$\frac{3}{2}\text{ fi. base alongside.} Sec. 20x12x \$\text{ sins. in the ground of companies \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of companies \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} \text{ 19x10x5 ins. 15 ins. in the ground of core \$\text{ core} 19x10x5 ins. 15
	7.00 0.00	mound of earth 12 ft high, 32 ft. base house Secondar of drain, 20 lks-wide, course Secondary of granite stone 19x10x5 ins-15 ins- in the ground for cort to sees-13, 14, 23 and 24 marked with 1 noteh on E. and 3 notenes on Sedges, dug rits 18x18 noteh on E. and 3 notenes on Sedges, dug rits 18x18 x12 ins- in each see. St ft. dist. and raised a mound of earth 2 ft. high, 44 ft. base alongside.
		Land gently rolling Soil 1strato.
		East on a random line bot. sees. 13 and 24.
	40 .00 80.00	
1		

Township 162 North, Range 82 West of the 5th Principal Meridian

Chains. S_89°55°W. on a true line bet. secs. 13 and 24. Va-16*09*E. Set a granite stone 11x9x8 ins. 8 ins. in the ground 40.00 for + sec- cor- marked + on N. fuco., dug pits lexler 12 ins. E. and W. of stone of the dist. and raised a mound of earth 14 ft. high, 34 ft. base alongside. The core to secs. 13, 14, 23 and 24. 00-08 tand gently rolling Soil Ist rata. Took observation for latitude at this sec. cor. and found it to be 49 01'N. N-0-01 W. bet. secs. 13 and 14-Va.13*05*E. Set a granite stone 14x11x9 ins. 10 ins. in the ground for t sec. cor. marked t on ". face, dug pits 18x18 x 12 ins. N. and S. of stone Ut fire dist, and raised a mound of earth 12 ft. high, 31 ft. base alongside. Set a granite stone 11x0x3 ins. 8 ins. in the ground for cor. to sees. 11, 12, 13 and 14 marked with 1 notch on E. and 4 notches on 8. edges, un pits 18x18 40.00 00.08 x12 ins. in each sec. 5 f. dist. and raised a mound of earth 2 ft. high, 42 ft. base alongside. Land gently rolling Soil 1st rate. N.89.55 K. on a rando line bet. secs. 12 and 13. Va.13.09.E. 40.00 Set a temporary + sec. cor-Intersected east boundary of the township 9 lks- N. 79.96 of cor. to secs. 7, 12, 13; and 18, wrich is a stone firmly set and properly marked and witnessed as described in the field notes furnished by the surveyor general. Thence I run S-89-59'W. on a true line bet. secs. 12 and 13. Va.16-09'E. Set a granite stone 11x10x7 ins. 8 ins. in the ground for 4 sec. cor. marked 4 on N. fage, dug pits 18x18x 12 ins. E. and ... of stone 52 ft. dist. and rased a mound of earth 14 f. high, 32 ft. base alongside. The cor. to secs. 11, 12, 13 and 14. 39-98 79.96 Land gently rolling Soil 1st rate.

. Township 162 North, Rungo 02 West of the 5th Principal Meridian.

Chains. 11-0-01 W- bet- secs- 11 and 12-Va-16-09'E. Enter meadow in drain, bears N. W. and N. E. Leave meadow, bears N. W. and N. **,60** Set a granite scone 14x8x7 ins. 10 ins. in the ground 5.80 Set a granite stone 14x1x7 ins. 10 ins. in the ground for 4 sec. or marked 4 on W. face, dug pits 18x18x 12 ins. N. and S. of stone of the dist. and raised a mound of earth 12 ft. high, 32 ft. base alongside. Set a granite stone 12x1x6 ins. 5 ins. in the ground for our to secs. 1, 2, 11 and 12, marked with 1 notch on E. and 5 notches on S. edges, dug pis 15x12x 40.00 00,03 12 ins. in each sec. 51 fb. dist. and raised a mound of earth 2 ft. high. 42 ft. base alongside. Land gently rolling Soil 1st rate. N.89.50 R. on a random line bot. secs. I and 12. Set a bemporary t see, cor.
Intersected cas boundary of the termship 2 lks. N.
of cor. to sees. 1. 3. 7 and 12, which is a stone firm
ly set and properly marked and witnessed as described
in the field notes furnished by the surveyor garant. 40,00 79.98 Thence I run West on a true line bet, secs. 1 and 12. Va-16*00'B-Set a granite stone 12x0x7 ins. 8 ins. in the ground for t sec- cor- marked t on N- face, dup pits 18x18x 12 ins. E- and N- of stone 5t ft. distand raised a mound of earth 1t ft. high, 3t ft. base alongside. The cor- to secs. 1, 2, 11 and 12. 39,99 79.98 Land gently rolling Soil Ist rate. N.0001 W. on a random line bets sees. 1 and 2. Va-16-00 E-Set a temporary 4 sec- cor-Intersec ed north boundary of the township at the cor Intersec ed north boundary of the township at the cor-to secs- 1, 2, 30 and 30, when is a stone firmly 40.00 set and properly marked and wilnessed as described in the field notes furnished by the surveyor general. Thence I rum. S.0°01°E. on a true line bet. secs. 1 and 2. Va.15*00°E-Set a granite stone 12x11x9 ins. 8 ins. in the ground 40.04 for t sec. cor- marked t on W. face, dug pits 18x18x

Township 162 North, Range 82 West of the 5th Principal Meridian

	Township	162 North, Range 82 West of the 5th Principal Meridian
-	Chains-	••
	80-04	12 ins. N. and S. of stone 5½ ft. dist. and raised a mound of earth 1½ ft. high, 3½ ft. base alongside. T. e cor. to secs. 1, 2, 11 and 12.
		Land gently rolling Soil 1st rate- August 5 1881.
	40 _* 00	From the cor- to secs- 2, 3, 34 and 35 on the south boundary of the township herein before described- I run N=0°02'W- bet- secs- 34 and 35. Set a granite stone 12x12x5 ins- 8 ins- in the grand for t sec- cor- marked to n W - face, dug pits 18x15 x12 ins- N- and S- of stone 21 f1- dist- and raised a remode of cortil 15 think 31 f1- dist- and played the second of cortil 15 think 31 f1- dist- and played the second of th
	49.00 56.00 80.00	for 4 sec. of a marked 4 on 1 - 1ges, they pite leads a mound of earth 14 ft. high, 3! ft. base alongside. In er meadow, and drain, boars N. ". and S. E. Leave meadow and drain, boars S. E. Set a granite stone 1288x6 ins. 8 ins. in the ground for cor. to secs. 26, 27, 34 and 35, marked with 2 notches on E. and 1 notch on S. edges, dug pits 15x18 12 ins. in each sec. 5f ft. dist. and raised a mound earth 2 ft. high, 41 ft. base alongside. Land gently rolling Soil 1st rate.
	40 -00 79-64	S.69°50°R. on a random line bet. secs. 26 and 35. Va.16°00°E. Set a temporary 4 sec. cor. Intersected H. and S. line 7 lks. H. of cor. to secs. 20, 26, 35 and 36. Thence I run.
	8 +30 15 +30 39 +33 79 +34	N-80*52*W- on a true line bet- socs- 23 and 30- Ya-170**S- Enter meadow, extends 1-00 ch- N- and 6-00 chs- S- of line- Lawe meadow, bears N- and S- Set a provide stone 12:28% is - C ins- in the provider of some large of some 12:18 ins- B- and N- of some 1 T- is:- and allow mored of mare 14 T- ins- B- and N- of some 1 T- ins- and instance of more of mare 14 T- ins- instance of some 15 T- ins- inspections of some 12 T- ins- inspections of some stone stone 20, 27, 30 and 30-
1		

Lead gambly colling Scil is revoSomehip 162 North, Rango 82 ost of the 5th Principal Meridian.

Townsh	ip 162 North, hange of the out I more and I
Gains.	•
	N=0°02*W- bebs secs- 23 and 27- Va=13°00*E-
47,00	Set a granite stone 12x2x7 ins. 8 ins. in the ground for t see. cor. marked t on W. face. day pi's 18x18x 12 ins. N. and S. of some : fie dist. and raised a
80 .00	for 4 sec. core marked 4 on we lace, and reised a 12 ins. Ne and Se of some 1 fig. (ist. and reised a mound of antilly 17.11, 1, 3t 1 base alongside. Set a granite stone 1/x11x5 ins. 10 ins. in the ground for core to soos. 22, 23, 26 and 27 marked with 2 noteles on E. and S. odgos, duy pits 18x12x12 insent neach soc. 5t f. dist. and raised a mound of earth 2 ft. high, 4t ft. base alongside.
	Land gently rolling Soil 1st rate.
	S-80°52'E. on a random ling bet. secs. 23 and 26. Va.16°09'E.
40 -00 79-62	Sot a temporary 4 sec. cor- Intersected H. and S. line 17 lks. S. of cor- to sees. 23, 24, 25 and 26 Thence I run
	N-89-59 W- on a true line bet - secs- 23 and 26- Va-16-09 B-
39-81 79-62	Set a granite stone 0x9x7 ins- 6 ins. in the ground for 4 sec- cor- marked 4 on N. face, dwg pits 18x18x 12 ins- E- and W- of stone 0f for dist- and reised a mound of carti 12 for high, 31 for base alongside. The cor- to secs- 22, 23, 26 and 27-
	Land gently rolling Soil 1st rate.
	N-0°02°W- bot- sees- 22 and 23- Ya-13°09°E-
40,000 80,000	for t sec. cor. marked t on W. lage, and raised a 12 ins. N. and S. of stone of the dist. and raised a mound of earth 1t ft. high, 3t ft. has alongside.
	Land gontly rolling Soil 1st rate-
1	1

·6.-

Chains. S.89°59°R. on a random line bet. secs. 14 and 23. Va.16*09'R. 10.00 Set a temporary + sec- cor-Intersected N. and S. line at the cor. to secs. 13. 79.58 14, 23 and 24. Thomes I run N.89.59.W. on a true line bot- secs. 14 and 23. Va-16-09'R. 29,00 Center of drain, 20. lks. wide, course S. R. Set a granite stone 14x9x5 ins. 10 ins. in the ground 36.79 for t sec. cor. marked t on N. face, dug pits loxby
12 ins. K. and T. of stone of ft. dist, and valed a
mound of earth 1t ft. high, of ft. base alongside. The cor- to secs. 14, 10, 22 and 23. 79.58 and gently rolling Soil Ist rate-N-0-02'W. bot. secs. 14 and 15. Va-13*09'R-40-00 Set a granite stone 11x9x7 ins. 5 ins. in the ground for t so - oor marked t on W- face, dug pits 18x1 x 12 ins. N. and S. of stone 5t ft. dist. and raised a mound of earth 1t ft. high, 3t ft. base alongside. Enter small meadow, and drain, bears N. W- and S. R. 65.00 3.00 chs. . Leave meadow, bears N.W. and S. B. Set a granite stone 22x14x3 ins. 1: ins. in the grand for cor. to sees. 10, 11, 14 and 10 marked with 2 72,60 00.08 notches on E. and 4 no chos or S. edges, dug pits lax 18x12 ins. in each sec. 51ft. .. dist. and raised a mound of ear the 2 ft. high, 42 ft. base alongside. Land gently rolling . Soil 1st rate. S.89*59'E. on a random line bet.s ecs. 11 and 14. Va.16*33*B. 40-00 Sot a temporar, t sec. cor.
Intersected N. and S. line 10 lks. N. of cor. to secs. **79-**52 11, 12, 13 and 14. Thence I run N. 3.55 7. on a true line bet. secs. 11 and 14. 17,50 Entor drain, 20 lks. wide, from W. boars N. E. and follow same to 20 -80 Leave drain from S. W. bears E. 39-76 set a granite stone 12x8x7 ins. 8 ins. in the ground

Ya-13°36'E-

formship 162 North, Range 83 West of the 8th Principal Meridian-

Chains-

for \$ sec. cor. marked \$ on N. face, dug pits 15x18x 12 ins. R. and W. of stone of the dist: - and raised a mound of carth 12 ft. high, 32 ft. base alongside. Canter of same drain 20 lks. wide, cause S. I. The cor. to secs. 10, 11, 14 and 15. 68,50 79.52

Land gently rolling Soil 1st rate.

N.0-02 W. bet. sees. 10 and 11.

Va-13°38'Esot a granite stone 12x12x0 ins. 8 ins. in the grand
for 1 50c. cor. marked 1 on W. face, dup pits 15x12x

12 ins. N. and S. of stone 51 ft. dist. and raised a
mound of earth 11 ft. high, 32 ft. base alongside.
Sot a granite stone 12xxx ins. 8 ins. in the ground
for cor. to secs. 2, 3, 10 and 11 marked wit 2
notenes on R. and 3 notenes on S. edges, dig pits
18x13x12 ins. in cach sec. 51 ft. dist. and raised a
mound of earth 2 ft. high, 42 ft. base alongside. 40.00 00,03

pand gently rolling Soil Ist rate.

S.89°50'Ne on a random line bet. secs. 2 and 11. Va-16*00*E-

Sd. a temporary t sec- cor-Intersected N- and S. line 2 lks. N- of cor- to secs-40,00 79.52 1, 2, 11 and 12. Thence I run.

2 and 11. N-89°54°7, on a true line bet secs-Va-1: 00 E-Set a granite stone 14x11x5 ins. 10 ins. in the 39,78

ground of t sic- our marked t on N. face, day pits 18x18x12 ins- E. and W. of stone 5 ft. dist. and raised a mound of earth 12 ft. high, 32 ft. base alongsid

Enter meadow and drain, bears N. W. and S. E. 74.00 Leave meadow bears N. W. and S. E. 79.00 The core to secs.2, 3, 10 and 11. 79+52

Land gently rolling. Soil Ist rate.

40-00

79-80

N.0°02'W. on a random line bet. se cs. 2 and 3. Va.16 00 E. get a temporary & sec- cor -

Intersected north boundary of the temship 23 lks. of cor- to secs- 2, 3, 34 and 35 which is a stone firmly Township 162 North, Range 82 West of the 5th Principal Meridian.

```
Chains,
            set and properly marked and witnessed as described in
            the field notes furnished by the surveyor general.
            Thence I run
            S.0-08'W. on a true line bet. secs. 2 and 3.
                                                                      Va.16*00'8.
            Set a granite stone 14x8x6 ins- 10 ins- in the ground
 39 -80
            for t see or marked t on We face, dur pits 1x1x 12 inselle and Se of stone of the diste and raised a
            mound of earth 14 ft. nigh, 32 ft. base alongside.
           Enter meadow and drain, bears N. W. and S. R. Leave meadow, boars N. W. and S. R.
 73,60
 79-50
. 79,80
          .The cor. to secs. 2, 3, 10 and 11.
            Lami gently rolling
Soil lst rate.
Took observation for Latitude at this sec.cor. and found
            it to be 48°53° N.
            From the cor- to secs. 3, 4, 33 and 34 on the south
            boundary of the township hereinbefore described
            I run
           N.0°03'W- bet. secs. 33 and 34.
At 2 P.M. August 6th, 31 Magnetic declin-
                                                                      Va-10-00'E.
            ation observed ---
            Reduction to mean ....
                                                                      Va. 1 14 E.
            Mean declination ...
40-00
          Set a granite stone lix10x5 ins. 8 ins. in the grand
           for t see, core marked ton We face, dug pits laxlax
12 ins. Ne and Se of stone St fte dist, and raised a
mound of earth 12 fte high, 32 fte base alongside.
Set a granite stone 14x2xt ins. 10 ins. in the fround
 00-08
            for com- to sees- 27, 23, 33 and 34 marked with 3 notches on E- and 1 notch on S- edges, dug pits 1 xlx
            12 ins. in each sec. 52 ft. dist. and raised a mond of earth. 2 ft. high, 42 ft. base alongside.
            Land gently rolling . Soil lst rate.
            S.89°55°E. on a random line bet. secs. 27 and 34.
                                                                      Va.16*09*B.
 40,00
            Set a temporary + sec. cor.
 79,92
            Intersected N. and S. line 42 lks. S. of cor. to secs.
            26, 27, 34 and 35.
            Thence I run
```

S-89°47°W- on a true line bet- secs- 27 and 34-Va-1 3009'B. 18-00 Enter meadow or drain, bears N. W. and S. R. 24-00

Leave meadow, bears N. W. and S. E.

femahip 180 North, Range 82 West of the 5th Principal Meridian-

(neins

Sot a granito stone 12x11x9 ins., 8 ins. in the ground **39.9**6 for \$ sec- cor- marked \$ on II- faces due pits 183 8x 12 ins- II- and II- of stone of ft- dist- and raised a

79,92

mound of earth 14 ft. high, 34 ft. base alongside. The cor. to sees. 27, 20, 33 and 34.

Land gently rolling Soil 1st rate.

Va.16*09'E.

N.0.03.W. bet. secs. 27 and 28. Rater meadow or drain, boars K. and W. 6-70

20,20 13,40

Enter meadow, bears Be and We-Leave meadow, bears Be and We-conter of drain, 20 lks. wide, course S. Be-set a granite Stone SECAS ins. 6 ins. in the ground for the secor, marked to n. We face, due pits 18x1cx 12 ins. Ne. and Se of stone 5½ ft. dist, and raised a mound of earth 1½ ft. high, 3½ ft. base alongside-Sat a granite stone 14x2x7 ins. 10 inse in the ground 40.00

30.00 for core to secs. "1, 22, 27 and 28 marked with 3 notches on E. and 2 notches on S. odges, dug pits 18x18 x12 ins. in each sec. 51 f. dist. and raised a mound ofearth 2 ft. high, 42 ft. base alongside.

Land gently rolling Soil 1st rate.

N.89-47 E. on a random line bot. secs. 22 and 27.

Va-16-09'E-

Set a temporary + sec- cor-40.00 Intersected N. and S. line 2 lks. S. of cor. to secs-79.96 22, 23, 26 and 27. Thence I run

> S.89-43'W. on a true line bet. secs. 22 and 27. Va-16*09*E-

Set a granite stone 2 x6x4 ins. 19 ins. in the ground 39.98 for t sec- cor. marked to N. face, dux pits 18x18x 12 ins. E. and W. of stone 5½ ft. dist. and raised a mound of earth 1½ ft. high, 3½ ft. base alongside.

The cor. to secs. 21, 22, 27 and 28.

79.96

Land gently rolling Soil 1st rate.

· Township 162 North, Range 82 West of the 5th Principal Meridian.

Chains.	
	N_0°03'W. bet. secs. 21 and 22.
40 ₊ 00	Set a granite stone 11x9x9 ins. 8 ins. in the ground for t sec. cor. marked t on W. face, dw. pits 18x1 x12 ins. N. and S. of slone of the dist. and mission
80•00	set a granite step arked ton We face, dwg pits laxis and ground for t sec. core marked ton We face, dwg pits laxis x12 ins. II. and S. of slone of the dist, and raised a mound of earth 1t ft. high, 3t ft. base alongside. Set a granite stone 17x13x6 ins. 12 ins. in the ground for core to secs. 15, 16, 21 and 22 marked with 3 notches on R. and S. edgos, dwg pits 18x18x12 ins. in each sec. 5t ft. dist. and raised a mound of earth 2 ft. high, 4t ft. base alongside.
	Land gontly rolling Soil lstrate-
	N.89°46'E. on a random line bet. secs. 15 and 22.
40 -00 80 -00	Set a temporary t sec. cor. Intersect A N. and S. line 2 lks. S. of cor. to secs. 14, 15, 22 and 23. Thence I run
,	S.89*45*W. on a true line bet. secs. 15 and 22. Va.10*09'E.
39.50	Enter meadow, extends 6.00 chs. N. and 2.00 chs. S. of line.
40.00 41.00 80.00	St a granite stone 9x9x6 ins.8 ins. in the ground for 1 sec. cor. marked 1 on N. face, dug rits 18x19x 12 ins. E. and W. of stone 5½ ft. distL and rated a mound of earth 1½ ft. high, 3½ ft. base alongside. Leave me adow, bears N. and S. The cor. to secs. 15, 13, 21 and 22.
	Land gently rolling Soil 1st rate.
	N-0-03'W. bet. segs. 15 and 16
\$1.00 40.00 80.00	Road, bears NN- E- and S- S. W. Set a granito stone 16x9x4 ins. 11 ina. in the ground for 4 sec. cor- maked 4 on W- face, dug pits 18x18x 12 ins. N. and S- of stone 5½ ft. dist. and raised a mound of earth 1½ ft. high, 3½ ft. base alongsides a granite stone 12x12x4 ins. 8 ins. in the ground for cor- to secs. 9, 10, 15 and 16 marked with 3 notches on E- and 4 notches on S- edges, dug pits 18x13 x12 ins. in each sec. 5½ ft. dist. and raised a mound of earth 2 ft. high, 4½ ft. base alongside.
	Land gently rolling Soil 1st rate.
).

formship 162 North, Range 82 West of the 5th Principal Meridian. Chains-N_89*45*R. on a random line bot. secs. 10 and 15. Va.16*36'E. Set a temporary + sec- cor-40-00 Intersected N. and S. line 5 lks. S. of cor. to sees. 80.04 10, 11, 14 and 15. Thence I run S.89-43'We on a true line bets secs. 10 and 15. Va.16*36 P. Center of drain, 20 lks. wide, course S. R. 7.00 tenter of train, so that wide, course of a second for \$ sec core marked \$ on \$ face, dug pits 182 8x 12 ins. F. and \$ of stone \$ ft. dist. and raised a mound of earth 1 \$ ft. high, 3 ft. base alongside.

7.00 Road, bears \$ 1.00 \$ 0.00 \$ 1.00 7.00 The cor. to sees. 9, 10, 15 and 16. 80-04 Land gently rolling Soil 1st rate-11-0-03'17. bet. secs. 9 and 10. Va.17.40 E. Sd a granite stone 12x9x9 ins-8 ins- in the ground 40,00 for 'sec-cor marked on "- face, dup pits 18x13x 12 ins. ".- and S- of sb no D ft. dist. and raised a mound of earth 1' ft. high, 3' ft. base alongside—Sot a granite sb no 12x8x3 ins. 8 ins. in the ground 80.00 for cor, to secs. 3, 4, 9 and 10, marked with 3 notches on E. and 5 notches on S. edges, dur pits 18x18 x12 ins- in each soc. 51 ft. dist. and raised a mound of earth 2 ft. high, 5 42 ft. base alongside. Land gently rolling Soil 1strate-Took observation for latitude at this sec. cor- and found it to be 48°53'N. N-89°43°E. on a random line bet. secs. 3 and 10. Va-1 300°E-10.00 Set a temporary + sec- cor-

00.08

Intersected N. and S. line at the cor. to secs-2, 3, 10 and 11-Thonce I run

Township 162 North , Range 82 West of the 5th Principal Merician.

Thains. S.89°43°W. on a true line bet. secs. 3 and 10. Va-16"00'E. Set a granite stone 14x7x6 ins- 10 ins, in the ground 40.00 for \(\text{t sec. cor. marked \(\text{t on N. face, dug pits 18x18x} \) 12 ins. \(\text{F. and W. of stone 5} \) ft. \(\text{dist. ani raised a mound of earth 1\(\text{t} \) ft. \(\text{high, 3} \) ft. \(\text{base alongside.} \) **65.3**5 Road, bears N. and S. The cor- to secs- 3, 4, 9 and 10- . 80.00 Land gently rolling . Soil 1st rate-N-0-03 W. on a random line bet. secs. 3 and 4. Va-16-00'R-Set a temporary & sec- cor-Intersected north boundary of the township 17 lks- E-40,00 80-05 of cor- to secs. 3, 4, 33 and 34, which is a stone firmly set and properly marked and witnessed as described in the field notes furn ched by the surveyor general. Thence I run . 3.0°10°B. on a true line bet.s ecs. 3 and 4. Va.16.00 E. Set a granite stone 11x9x7 ins. 8 ins. in the ground 40.05 for t sect our marked t on W. face, due pits 18x18x 12 ins. N and S. of sb ne 5 ft. dist. am raised a mound of earth 12 ft. high, 31 ft. hase alongside. Cember of drain 30 lks. wide, course R. 40.25 The core to secs. 3, 4, 9 and 10. 80-05 Land gently rolling Soil 1st rate. August 6th., 1891. From the cor. to secs. 4, 5, 32 and 33 on the south boundary of the township hereinbefore described I run 11.0°04°W. bet. secs. 32 and 33. Va-16-09'Eset a granite stone 12x8x7 ins. 8 ins. in the ground for 1 sec. cor. marked 4 on W- face, dug pits 18x18x 40.00 12 ins. N. and S. of stone 5½ ft. dist. and raised a mound of earth 1½ ft. high. 3½ ft. base clongside. Enter meacow, extends 5.00 chs. R. and 3.00 chs. W. of line. 58,60 64.00 Leave meadow, bears E. and W.

Sot a granite stone 16x8x8 ins. 11 ins. in the grand

for cor- to secs. 28, 29, 32 and 33 marked with 4

80,00

formship 162 North, Rango 82 Test of the 5th Principal Meridian-

(22 ms-

notches on E. and 1 notch on S. edges, duy pits 18x18x 12 ins. in each sec. 5% ft. dist. and raised a mound of earth 2 ft. high, 44 ft. base alongside.

and cently rolling Soil 1st rate.

S.89*55*R. on a random line bet. secs. 28 and 33. Va.16-09 B.

Set a temporary & sec. cor-intersected M. and S. line 2 lks. N. of cor- to secs. 41.00 79.24 27, 28, 33 and 34.

Thence I run

N.89-54'W. on a true line bet. secs. 28 and 33. Va. 16-09'E. Sot a granite store 14x11x9 ins. 10 ins. in the ground for 1 sec. for - murked t on He face, an the ground for 1 sec. for - murked t on He face dup pits 18x18x 12 ins. "- and "- of stone 5t ft. dist. and raised a mound of earth 1t ft. high, 3t f - base alongside. The cor- to secs. 28, 29, 32 and 33. 39.92 73.84

Land gently rolling Soil 1st rate.

11.0004 W. bet. sees. 28 and 29.

Va.1 .*06 E-Set a granite stone lexilx5 ins. 8 ins. in the ground

for \$ sec. or. marked \$0 on \$7. face, day pits 18x18x 12 ins. 11. and \$5. of stone \$5 ft. dist. and raised a mound of oarth 1. ft. high, 3! ft. base alongaide. Set a granite stone 15x8x8 ins. 10 ins. in the ground for core to secs. 20, 21, 28 and 29 marked with 4 notches on E. and 2 notches on S. edges, dug pits 18x18 x12 ins. in each sec. 5: ft. dist. and raised a mound of earth 2 ft. high, 41 ft. base alongside.

Land gently rolling Soil 1st rate-

S-89-54 E. on a rank m line bet. secs. 21 and 28. Va.16*00 B.

Set a temporary 4 sec. mor-Intersected :.. and S. line 16 lks. S. of cor. to secs. 40 ທັດ 79.86

21, 22, 27 and 28 -Thence I run

Township 162 North, Range 82 West of the 5th Principal Meridian.

Chains-	
	S.89°59'W. on a true line bet. secs. 21 and 28.
8,60 12,00 39,93	Na.16°00'R. Enter meadow, bears N. W. and S. R. Leave meadow, bears N. W. and S. R. Set a granite stone 11x10x7 ins. 8 ins. in the ground for \$\frac{1}{2}\$ sec. cor. marked \$\frac{1}{2}\$ on \$\frac{1}{2}\$ ft. dist. and raised a mound of earth 1\$\frac{1}{2}\$ ft. base alongside. The cor. to secs. 20, 21, 28 and 29.
	Land gently rolling Soil 1st rate.
	N ₀ 0*04*W _e beta socs. 20 and 21. Va.10*00*E.
40,000	Sot a granite stone 18x7x7 ins. 11 ins. in the ground for \$ sec. cor. marked \$ on " face, day pits 18x1&x 12 ins. N. and S. of stone 5; ft. dist. and raised a mound of earth 1; ft. high, 3; ft. base alongaide.
72.00	Enter meadow, and drain, bears west and S. E. Leave meadow, bears west and S. E.
79 140 80 100	Leave meadow, bears west and S. R. Set a granite stone 14x12x4 ins. 1 0 ins. in the groum for our to sees. 13, 17, 20 and 21, marked with 4 notches on E. and 3 notches on S. odges, dug pits 18x1 x12 ins. in each sec. 51 ft. dist. and raised a mound of earth 2 ft. high, 41 ft. base alongside.
	Land gently rolling Soil 1st rate.
40-00	N-89°59'E- on a random line bet- secs- 16 and 21. Va-16°09'E. Sot a temporary 4 sec- cor-
79 -88	Intersected N. and S. line 7 lks. N. of cor. to secs- 15, 16, 21 and 22. Thence I ran
;	N-89*58'W- on a true line bet- secs- 16 and 21. Va-16*09'E-
2.55 39.94	Trail, begrs N. and S Set a granite stone 12x9x6 ins. 8 ins. ir the ground for t sec. cor. marked t on N. face. dug pits 18x18
. 79₊88	for t sec- cor- marked t on N- face, dug pits 18xB x12 ins. B- and W- of stone 55 ft. dist. and raised a mound of earth 15 ft. high, 35 ft. base alongside. The cor- to secs. 16, 17, 20 and 21.
	land gently rolling Soil 1st rate.
	·

formship 162 North, Range 82 West of the 5th Principal Meridian.

Chains. 11-0*04'W. bet- secs. 16 and 17-Va.16°00'E. Set a granite stone 14x9x5 ins. 10 ins. in the ground 40,M for t soc- cor- marked t on " - face, dug pits 18x18x for a sock work marked t on he lage, and plus loxest 12 ins. He and Se of stone 5-ft, dist. and raised a mound of earth 12 ft. high, 32 ft. base alongside-later meadow, extends 4.00 chs. He E. and 8.00 chs. 46,80 Lowe meadow, bears il. E. and S. W.
Set a granite stone 11x0x7 ins. 8 ins. in the ground
for cor. to sees. 8, 9, 16 and 17, marked with 4
notches on il. and S. odges, dug pits 18x18x12 ins. in
each see. 5 ft. dist. and raised a mound ofearth (0, 64 80,00 2 ft. high, 4' ft. base alongside. Land gently rolling Soil 1st rate. S.89*58'K. on a random line bet. secs. 9 and 13. Va.16-40 E. Set a temporary } sec- cor-40,00 Intersected R. and S. line 5 lks. S. of cor. b secs. 79,98 9, 10, 15 and 16. Thence I run West on a true line bet. secs. 9 and 16 -Set a granite stone 14x8x6 ins. 10 ins. in the ground for 4 sec. cor. marked ; on % face, due pits 18x18x 12 ins. E. and ... of stone 5; ft. dist. and raised a mound of earth 12 ft. high, 3; ft. base alongside. 39,99 The cor. to secs. 8, 9, 1 and 17. 79.98 Land gently rolling Soil 1st rate-N.0-04'W. bot. secs. 3 and 9. Va.16*45*E-Set a granite stone 12x8x6 ins. 8 ins. in the ground for \(\frac{1}{2}\) sec- cor- mark \(\frac{1}{2}\) on \(\frac{1}{2}\). face, dug pits 18x18x 12 ins. \(\frac{1}{2}\) and S. of stone S! ft. dist- and raised a mound of earth \(\frac{1}{2}\) ft. high, \(\frac{3}{2}\). ft. base alongsidemound of earth \(\frac{1}{2}\) ft. high, \(\frac{3}{2}\). ft. base alongsidefor cor- to secs. \(\frac{4}{2}\), \(\frac{5}{2}\) and \(\frac{9}{2}\) marked with \(\frac{4}{2}\) notches on \(\frac{5}{2}\) edges, dug pits 18x18x12 inside each sec. \(\frac{5}{2}\) ft. dist- and raised a mound of earth \(\frac{1}{2}\) ft. \(\frac{1}{2}\) thigh, \(\frac{4}{2}\) ft. bese alongside. 40.00 80,00 2 ft. high, 41 ft. base alongside. Land gently rolling Soil 1st rateTownship 162 North, Range 82 West of the 5th Principal Meridia.

	TOMITALITY	p too north, hange or west of the Sth Principal Meridia
	Chains.	
		East on a random line bet- secs. 4 and 9.
	40.00 80.02	Sot a temporary 1 sec. cor. Intersected N-and S-line 3 lks. N- of cor. b sec. 3, 4, 9 and 10. Thence I run
-	-	N-89-59 7. on a true line bet- sees- 4 and 9.
	40±01 ∴ 80±02	Va.1000's. Set a grapite stone 12x9x7 ins. 8 ins. in the ground for t soc. cor. marked t on i. fuce, due the lexist 12 ins. K. and W. of stone 5! ft. dist. and raised a mound of earth 14 ft. high, 3! ft. base d ongside. The cor. to secs. 4, 5, 8 and 9.
		land gently rolling Soil 1st rate.
İ	.*	
		N-0°04°W- on a random line bet- sees. 4 and 5-
	40,00 79,83	Set a temporary t soc. cor. Intersected H. boundary of the township at the cor. to sees. 4, 5, 32 and 33, which is a stone firmly set and properly marked and witnessed as described in the field notes furnished by the surveyor general. Thence I run
		S-0°04'E- on a true line bet- sees- 4 and 5-
	25 -40 39 -83	Va.16-15'E. conter of drain 20 lks. wide, course S. E. Set a granite stone 14x0x5 ins. 10 ins. in the grand for \$\frac{1}{2}\$ sec. cor. marked \$\frac{1}{2}\$ on \$\frac{1}{2}\$ face, day pits 18x18x 12 ins. \$\frac{1}{2}\$ and \$\frac{1}{2}\$ of stone 5\frac{1}{2}\$ ft. dist. and raised a mound of earth 14 ft. belong \$\frac{1}{2}\$ the standard of the stand
	79 -83	mound of earth 12 ft. high, 31 ft. base alongside. The cor. to secs. 4, 5, 8 and 9.
		land gently rolling Soil 1st rate.
		From the cor. to secs. 5, 3, 31 and 32 on the south boundary of the township hereinbefore described I run
		N-0-05°W- bet- secs. 31 and 32-
	40-00	Sot a granite stone 14x11x5 ins. 10 ins. in the ground for t sec. cor. marked ton ", face, due nits 18x18x

Va.16°06'E.

Ya.16°06'E.

for t sec. cor. marked t on "- face, dup pits 18x18'.

12 ins. N. and S. of stone 5! ft. dist. and raised a mound of earth !! ft. igh, 3! ft. base alongside.

Set a granite stone 12x12x6 ins. 8 ins. in the grand for cor. to secs. 20, 30, 31 and 32, marked with 5

80.00

824

Township 162 North, Rango 82 West of the 5th Principal Meridian-

Chainsnotches on R- and 1 notch on S- edges, dug pits 18x18x 12 ins. in each soc. 5' ft- dist- and raised a mound of earth 2 ft- high, 4' ft- base alongside. Land gently rolling Soil istrate. S.89°50'E. on a random ling bet. secs. 29 and 32. Set a temporary & sec. cor-40.00 Intersected H. and S. line 26 lks. S. of cor. b secs. 79:88 28, 29, 32 and 33. Thence I run S.89°54'W. on a true line bet. secs. 20 and 32. Va-16*06*E-Set a granite stone 11x9x6 ins. 8 ins. in the ground 39,94 for t sec. cor. marked ton the face, dur pits laxlax 12 ins. the and W. of stone 5th fit dist. and raised a mound of earth 1th fit. high, 3th base alongside. The cor. to sees. 29, 30, 31 and 3th 79.88 Land gently rolling Soil 1st rate. N.89°55°W. on a random line bet. secs. 30 and 31. Va. 16 06 E. 40,00 Set a temporary } sec- cor-Intersected west boundary of the township 17 lks. N-79.21 of cor. to secs. 25, 30, 31 and 36 hereinbefore desoribed. Thence I run N.89-58 B. on a true line bet. secs. 30 and 31. Va-16-06'E-Set a granite stone 12x8x6 ins. 9 ins. in the grand for t sec. cor. marked to n N. face, due pits 18x18x 12 ins. E. am W. of stone 5' ft. dist. and raised a mound of earth 1' ft. high, 3' ft. base alongside. The cor. to secs. 29, 30, 31 and 32. 39.21 79,21 Land wently rolling Soil lst rate. N.0-05 W: - bet - secs - 29 and 30 -Va-16-06'E-Set a granite stone 14x13x7 ins. 10 ins. in the ground for 4 sec. cor. marked on W. face, dur pits 18x18x 12 ins. W. and S. of stone 5% ft. dist. and raised a 40.00

Township 162 North, Range 82 West of the 5th Principal Meridian.

Chains. mound of earth 1t ft. high, 3t ft. base alongside. Set a granite stone 12x8x8 ins. 8 ins. in the ground 80..00 for cor. to secs. 19, 20, 29 and 30, marked with 5 notches on R. and 2 notches on S. odges, dur pits 18x18 x12 ins. in each sec. 6 ft- dist- and raised a mound of earth 2 ft. high, 42 ft. base alongside. and gently rolling Soil 1strate. Took observation for latitude at this sec. cor. and found it to be 48°50' N-N-89-54 R. on a random line bet. secs. 20 and 29. Va -16 00 R. 40.00 Set a temporary t sec. cor.
Intersected N. and S. line 9 lks. S. of cor. to secs. 79.94 20, 21, 28 and 29. Thence I min S.89*50'W. on a true line bet. secs. 20 and 29. Va-16*00!R-Set a granite stone 14x11x7 ins. 10 ins. in the ground for t sec. cor. marked to n le face, duy pits 15x15x 12 ins. E. and W. of stone 5t ft. dist. and rmised a mound of earth 1t ft. high, 3t ft. base alongside. 39.97 79_94 The cor - to secs. 19, 20, 29 and 30. Land gently rolling Soil lat rate. S.89°58'W. on a random line bet. secs. 19 and 30. Va.16*00*R. 40.00 Set a temporary + soc. cor-Intersected west boundary of the township 2 lks. S. of cor- to secs. 19, 24, 25 and 30 hereinbefore 79.21 described -Thence I run N.89°59'E. on a true line bet. secs. 19 and 30. Va.16"00'E. Set a granite stone 12x9x9 ins. 8 ins. in the ground for t sec. cor. marked t on N. face, dug pits 18x18x 39.21 12 ins. E. and T. of stone 5% ft. dist. and raised a mound of earth 12 ft. high, 32 ft. base alongside. The cor. to secs. 19, 20, 29 and 36 79.21 Land gently rolling Soil 1st rate.

829

Tomahip 162 North, Range 82 est of the 5th Principal Meridian-

Chains. N_0-05'W. bet. secs. 19 and 20-Set a gramite stone llx8x8 ins- 8 ins- in the ground for \$ soc. cor. marked \$ on "- face, dug pits 18x18x 12 ins. "- and \$- of stone 5 ft. (1st. and raised a mound of earth 12 ft. hi/h, 32 ft. base alongsideset a granite stone 12x0x7 ins. 10 ins. in the ground 40.00 80-00 for cor, to socs. 17, 18, 19 and 20, marked with 5 notches on E. and 3 notches on S. edges, dug pits 18x18 x12 ins. in each sec. 5 ft. dist. and raised a mound of earth 2 ft. high, 4: ft. base alongside. Land gently rolling Soil 1st rate. N.89°50'E. on a random line bet. secs. 17 and 20. Va.16-00'E. 40,00 Sot a temporary & sec- cor-Intersected N. and S. line 10 lks. N. of cor. to sees. 79.92 16, 17, 20 and 21. Thence I mn S.89-54.W. on a true line bet. secs. 17 and 20. Va.16900°R-Wa.16700°R.

Enter meadow and drain, bears N. W. and S. E.

Leave meadow, bears N. W. and S. R.

Set a grapite stone 12x8x6 ins. 8 ins. in the ground for \$ sec. or. marked \(\) on N. face, dup pits 18x18x 12 ins. E. and W. of stone 5 ft. dist. and raised a mound of earth 1 ft. hig., 3 ft. base alongside.

The cor. to secs. 17, 18, 19 and 20. 22-00 30.50 39,96 79.92 Land gently m lling Soil 1st rate-S.89.59.W. on a random line bet. secs. 18 and 19. Va.16 00 E-40,00 Set a temporary t sec. cor-Intersected west boundary of the township 3 lks.S. of 79.15 cor. to secs.13, 18, 19 and 24 hereinbefore described. Thence I run Rast on a true line bet. secs. 18 and 19 Va.16 00 'E-Set a granite stone 12x12x5 ins. 8 ins. in the ground for 4 sec. cor. marked 1 on 1. face, due pits 18x18x 12 ins. E. and W. of stone 5 ft. dist. and raised a mound of oarth 1 ft. high, 3 ft. base alongside. The cor. to secs. 17, 18, 19 and 20. 39.15 79-15 Land gently rolling Soil 1st rate.

Township 182 North, Range 82 West of the 5th Principal Meridian.

Chains.	
	N.0°05'W- bet - secs 17 and 18- At 3 P- M- August 7,1891, Maynetic declination observed Va-16°00'E. Reduction to mean Q4- Mean declination Q4-
40 -0 0	Set a granite stone 12x8x6 ins. 8 ins. in the gr. ad for t sec. cor- marked to m W. face, due nits 18x18x
80,00	mound of earth 1½ ft. high, 3½ ft. base alonyside. Set a granite stone 14x10x0 ins. 10 ins. in the ground for cor. to sees. 7, 8, 17 and 18 marked with 5 notches on E. and 4 notches on S. adges, dug pits 18x1 x12 ins. in each sec. 5½ ft. dist. and raised a mound of earth 2 ft. high, 4½ ft. base alongside.
	Land gently rolling Soil 1st rate.
- '	
· .	N-89 54 E- on a random line bet- secs- 8 and 17
40,00 79,90	Set a temporary t sec. cor. Intersected M. rand S. line 15 lks. S. of cor. to secs 8, 9, 16 and 17. Thence I run
	S-89-48 W- on a true line bet, secs. 8 and 17.
39 -95 73 -80 79 -90	Va.16*45'E. Set a granite stone llx9x7 ins. 8 ins. in the ground for a sec. cor. marked t on N. face, dug pits l8x18x 12 ins. E. and W. of stone 55 ft. dist. and raised a mound of earth lt ft. high, 35 ft. base alongside. Genter of drain, 20 lks. wide, course S. E. The cor. to secs. 7, 8, 17 and 18.
	Land gently rolling Soil 1st rate.
	West on a random line bet- secs- 7 and 18-
40,00 79,08	Set a temporary + sec. cor. Intersected west boundary of the township 13 lks. N. of cor. to secs. 7, 12, 13 and 18 heroinbefore dosoribed. Thence I run
	N-89*54*R. on a true line bet- secs. 7 and 18.
39-08	Set a granite stone 13x8x6 ins. 9 ins. in the ground for t see - our - marked to not lie face, due pits 18x8x 12 ins. E. and W. of stone 5th ft. dist. and raised a mound of earth 1th things 3th base alongside.
İ	

831

nomship 182 North, Range 82 West of the 5th Principal Meridian.

Chains. The cor. to secs. 7, 8, 17 and 18. 79.08 Land gently rolling Soil 1st rate -N_0*05'W. bet. secs. 7 and 8. Conter of drain, 30 lks. wide, course S. E. 3,00 Set a granite stone 12x9x7 ins. 8 ins. in the ground 40.00 for 4 sec. cor. marked ton ". face, duy pits 18x18x 12 in... ". and 5. of stone 5; ft. dist. and raised a mound of earth 1; ft. high, 3; ft. base alonyside. Set a granite stone 18x12.11 ins. 12 ins. in the ground 80 JY for cor- to secs. 5, 6, 7 and 8, marked with 6 notches on E. and S. edges, dw. pits 18x18x12 ins. in each sec. 5; ft. dist. and raised a mound of earth 2 ft. high, 4! ft. base alongside. Land gently rolling Soil 1st rate-H-89*48'E. on a random line bet. secs. 5 and 8. Va-16-30 E-Set a temporary & sec. cor-Intersected !!. and S. line at the cor- to secs. 40. ↑ 79.88 4, 5, 8 and 9. Thence I run S.89*48*W. on a true line bet. secs. 5 and 8. Va-16*15*R-Set a granite stone 12x9x7 ins. 8 ins. in the ground for 4 sec. cor. marked 4 on N. face, un pits 18x18x 12 ins. E. and W. of stone 5 ft. dist. and raised a mound of earth 1 ft. high, 3 ft. base alongside. The cor. to sees. 5, 6, 7 and 8. 39.94 79.88 Lend gently rolling Soil 1st rate. S.89 54 W. on a random line bet. sees. 6 and 7. Va.16*30*E-Sot a temporary a sec. cor-Intersected west boundary of the township 16 lks- S 40.00 79.02 of cor. to secs. 1, 6, 7 and 12 hereinbefore described. Thence I run . S.89-59'E. on a true line bot. sees. 6 and 7. Va-16-30 E-Enter meadow and drain, bears S. E -38.00 Set a granite stone 14x12x5 ins. 10 ins. in the ground 39.02

Township 162 North, Range 82 West of the 5th Principal Meridian.

Chains,	
40.50 79.02	for 4 sec. oor- marked 4 on N. face, dug pits 18x18x 12 ins. E. and 7. of stone 5½ ft. dist. and raised a mound of earth 1½ ft. high, 3! ft. base alongside. Leave meadow, extends N. W. and S. E. The cor- to secs. 5, 6, 7 and 8.
	Land gently rolling Soil Istrate-
	N-0-05 W. on a random line bet. secs. 5 and 6.
40.00 79.96	Va.16-30's. Set a temporary { sec. cor. Intersected north boundary of the township 8 lks. R. of cor. to secs. 5, 6, 31 and 32 which is a stone firmly set and properly marked and witnessed as described in the field notes furnished by the surveyor general. Thence I man
	S.0.08 E. on a true line bet. secs. 5 and 6.
39.96	Va.15 30 P. Set a granite stone 16x8x8m ins. 11 ins. in the groun for 1 sec. cor. marked 1 on W. face, dur pits 18x18x 12 ins. N. and S. of stone 5 ft. dist. and raised a mound of earth 1 ft. high, 3 ft. base alongside.
79,9 6	The cor- to secs. 5, 6, 7 and 8.
	Land gently rolling Soil 1st rate. August 7th., 1891.
. * *	Soil Ist rate. August 7th., 1891.
	Soil Ist rate. August 7th., 1891. Magnetic Declinations
	August 7th., 1891.
	August 7th., 1891. Magnetic Declinations At 8 A.H. Aug. 5th, 1891, Magnetic declination observed Va.16-09'B. Reduction to mean Va.16-08'B. Wa-16-06'B.
	August 7th., 1891. Magnetic Declinations At 8 A.M. Aug. 5th, 1891, Magnetic declination observed Reduction to mean Mean declination At 2 P.M. Aug. 6th., 1891, Magnetic declination observed Reduction to mean Ya.16*09'R. Reduction to mean Va.16*09'R.
	August 7th., 1891. Magnetic Declinations At 8 A.M. Aug. 5th, 1891, Magnetic declination observed
	August 7th., 1891. Magnetic Declinations At 8 A.M. Aug. 5th, 1891, Magnetic declination observed Reduction to mean Mean declination At 2 P.M. Aug. 6th., 1891, Magnetic declination observed Reduction to mean Ya.16*09'R. Reduction to mean Va.16*09'R.
	At 8 A.M. Aug. 5th, 1891, Magnetic declination observed Reduction to mean Mean declination At 2 P.M. Aug. 6th., 1891, Magnetic declination observed Reduction to mean Mean declination At 3 P.M. Aug. 7th., 1891, Magnetic declination observed Reduction to mean At 3 P.M. Aug. 7th., 1891, Magnetic declination observed Reduction to mean At 3 P.M. Aug. 7th., 1891, Magnetic declination observed Reduction to mean At 3 P.M. Aug. 7th., 1891, Magnetic declination observed Reduction to mean

833

Township 162 North, Range 82 West of the 5th Principal Meridian.

Chains-

GENERAL DESCRIPTION

This township is high, gently rolling prairie and is covored with a fair growth of grass.
There is no water in the township. There are a few boulder scattered over the township.
With a sufficiency of rain the township would be very productive.

Thomas F. Marshall,

U. S. Deputy Surveyor.

835-

formit 162 North. Range 82 Yest of the 5th Princip: 1 Meridian.

Chains.

Note: This township was surveyed under Contract No. 5 dated May 18,1891 embracing the subdivision of 31 full townships and 3 fractional townships liability \$9000.00 which contract expires December 1st., 1891 Refore commencing the survey I was awarded Contract No. 8 dated June 3,1891 liability \$5000.00 expiring January 1st. 1892.
These Contracts embraced an amount of survey

the execution of which " any one man within the time specified would be a physical impossibility. For this reason and noting the absence in my special instructions of anything prohibiting the use of a Compassman I employed to assist me in the execution of this Contract a Compassman and an additional crew. Their

affidavits appear in proper place.
I employed for the position of Compassman Mr. R C.Chilecti of LaGrace S. bak. who proved to be an excellent surveyor in all respects. Nr. Chilcott and the erry with him worked from the same damp I did at all times and the work done by them at all times was under my own direct supervision and subject to my rigid

exumination

Both crews received instructions and training in the minutest details from me at all times. The lines run by Mr. Chilectt vers checked with lines run by me and by my own instrument while his instrument was always under my care and scruting.

The two crews were made up of men of excellent character and reculiar fitness for the buisness and the utmost harmony prevailed and were operated as a whole to the end of producing good work of a uniform character that this was accomplished a rigid

examination of the work will show.

A symmetry of the work will show the entire execution of I was present during the entire execution of the work bases identified the symmetry bases identified the symmetry bases identified the symmetry bases identified the symmetry bases identified the symmetry bases identified the symmetry bases in the symmetry bas the survey of this township and the work bears identically the same character that it would or could bear had I run each mile in person having been done according to my minute directions and afterwards critically examined and checked by me.

Oving to circumstances under which the survey of this township has been made I take the liberty of slightly modifying my final a fidavit accompanying

the same thereby adapting it to this case.

Thomas F. Warshall,

U S. Deputy Surveyor.

List of Names. A list of the names of the individuals employed by From as J. marshall , P. S. Deputy Surveyor, to assist in running, measuring, and sating the lines and corners described in the foregoing field systes of the survey of the ... weeks of Sup. 162 n. 9. 12 It Chineful Merilian, in roth Lalita but of the the dayold, Lain mand arthur B. Stack, Au man Than man. having It , Carif. Fromgen and Excust of Thomps Garles in monis, moundman Final Gath of Assistants: We berely certify that we assisted thomas I Muschal The page or portions of the furtherness of the furt C. J. 62. number Meridian, Tark Lakera , as are represented in the

begoing field notes as having been surveyed by him and under his direction; and that said survey has been mpets, to the best of our knowledge and belief, well and faithfully surveyed, and the corper monuments established morning to the instructions furnished by the U.S. Surveyor General for Cart Datata Thur to Itrick, Grayman John rand Grayman E, Truck, Gamman,

mound mand. having the rooms. Charle art. mount mand moringman

ing tour liet, and accommensate the along homes 7. Marche

final Dath of U. S. Deputy Surveyor.

1,	, U. S. Deputy Surveyor
solemnly syear that, in pursuance of instructions	received from
Surveyor General for	, bearing date of the
	re well, faithfully, and truly, in my own proper person, and in a
	U. S. Surveyor General for
surveying manual, and the laws of the United Sta	stes, surveyed all those parts or portions of
Meridiah in the	, as are represented in the
the corners of said survey have been established	and under my directions; and I do further solemnly awar that and perpetuated in strict a cordance with the surveying man
printed instructions, the special written instruction	as of the U. S. Surveyor General for
and in the specific manner described in the field and should any fraud be detected, I will suffer approved August 8, 1848.	notes, and that the foregoing are the true field notes of such sen the penalty of perjury under the provisions of an Act of Coa
\	U. S. Deputy Survey
Subscribed and sworn to before me this	·····)
day of	\ }
314.	\
	Appropal
-	
9 5 cm	the U. S. Barvepor General,
)	the second second
<i>*</i>	,18 .
	\
The foregoing field notes of the survey of.	

	execute
under his Contract No, dated	18 having been criti
examined, the necessary corrections and explanat	ions made, the said field notes, and the surveys they describe
hereby approved.	
	U. S. Surveyor Gener
	· · · · · · · · · · · · · · · · · · ·
	he field notes of the above-described surveys in
, has been correc	etly copied from the original notes on file in this office.
	U. S. Surveyor Gener
•—III	O, 14 01117

List of Names. A list of the names of the individuals employed by homas J. Markall , U. S. Deputy Surveyor, to assist in gunning, measuring, and saring the lines and corners described in the foregoing field notes of the survey of the . Let be destructional Luce of Sup. 162 11. 4. 82 Trucifal Meridian, in north william of the 50 the respective capacities in yelich they acted t & Chaming Chient Compassinary Tred i Hodge. hair man. Edward Wifes, Fright H. Caker, Chain man. Flagman nhundman. John Hocken Liny noung'm and Mound man. John G. Flister. moundman. Final Oath of Anninta We hereby certify that we assisted home J. Muchael a purg or portions of the Autoureum a way 1, U. S. Deputy Surveyor, in surveying all 7.82 Tunipal Meridian, North Latata as are represented in the forgoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner manuments established, wording to the instructions furnished by the U. S. Surveyor General for Horth Dalcata 6 Chamuns Thelest, Compaismand me a sickus, tengman Trea & Andres Thatis man. Edura It Niker, Lain man. you worken very moundmand. Carich ir Baker mound man John It chen jerry mouraman. John G. Kestor mound many d and sworn to before me thi mo to what any inconsequely U. C. Deputy surveyor

with musicip. Thomas F. March

final Dath of II. 9. Deputy Surveyor. 1. Thomas I marsha rocived from Grastics solemnly swear that, in <u>pursuance</u> of instructions Surveyor General for North Lakata , bearing date of the , 189/ , I have well, faithfully, and truly, in my own, is conformity will the instructions furnished by the U. S. Surveyor General for . How surveying manual, and the laws of the United States, surveyed all the Twegours Tiels unful Meridian, in the State of north Lake going field notes as having been surveyed by me, and under my directions; and I do further solemply swear that all the corners of said survey have been established and perpetuated in strict soverdance_with the s printed instructions, the special written instructions of the U. S. Surveyor General for Morth Suke and in the specific manner described in the field notes, and that the foregoing are the true field notes of such m and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of approved August 8, 1846. Approval Office of the R. S. Burvepor Seneral, examined, the necessary corrections and explanations made, the said field notes, and the surveys hereby approved. I certify that the foregoing transcript of the field notes of the above-described surveys in .. aluta, has been correctly copied from the original notes on file in